REMARKS

Claims 20-23 and 25-50 are pending in the application. Claims 20-23 and 25-50 stand rejected. Claims 20-23, 25, and 40 have been amended as part of this response

Telephonic Interview

Applicant thanks the Examiner for the recent telephonic regarding the pending claims. Applicant acknowledges receipt of the Interview Summary with a mailing date of November 17, 2008. Applicant accepts the Examiner's summary of the interview, however offers the following corrections and additions. Applicant stated to the Examiner that Applicant feels that there are strong arguments against the §103 rejections in the Office Action, but has decided to amend the independent claims to cite "first liquid silane" instead of "first chemical", and also to additionally amend claim 25 to add a temporal aspect to the dehydration steps, in order to enhance allowability of the claims. Applicant stated that the broader claims would be reserved for prosecution in later action or, more likely, in a continuation application.

In the interview, Applicant pointed out the non-analagous nature of the referenced prior art, both regard to the combined prior art itself, and to the present invention.

Claim Rejections – 35 USC § 103

SILANE – SURFACE REACTION

The Examiner has rejected claims 20-23, 25-40, and 46-49 "under 35 U.S.C. 103(a) as being unpatentable over Loan et al. (US 6,136,725)in view of Hill et al. (GB 2107360 A)" . Office Action, page 3. Applicant requests reconsideration in light of the amendments to the claims and in light of the arguments below.

Applicant revisits earlier comments in response to prior rejections regarding silane. Both Loan and Hill mention silane as a reactant. Hill specifically mentions monosilane

(SiH_4), and Loan mentions silane, at Column 2, line 11, in the context of being a precursor, consistent with monosilane. However, as previously discussed in responses, the current invention is geared toward organosilanes, commonly known as silanes. These compounds encompass, for example, alkyl, amino, mercapto, epoxy, and flouro silanes. Applicant feels, as stated above, that the processes of independent claims 20 and 40 can be argued for allowability with the "first chemical" recited in the claims. However, in order to differentiate from Hill and Loan even more clearly, the prior "first chemical" reference is being replaced with a "liquid silane" reference, to further clarify away from these silane gas processes.

Applicant felt that the discussion in the response to the prior Office Action, as well as the Telephonic Interview in support of the prior response, clarified that there were distinct differences between the cited references and the claimed invention, in that in the present invention the vaporized liquid silane reacts with the surface of the substrate, typically anchoring to embedded hydroxyl ions. This stands in contrast to processes in the cited references, which, as in the case of Hill, appear to create a layer with a eutectic bond.

Once again, Applicant feels that the claims as previously submitted were distinct from the prior art, yet in order to promote allowance has modified both independent claims to include reference to reacting vaporized liquid silane with the surface of the substrate.

DEHYDRATION

Applicant feels that the independent claims as now amended are clearly patentable over the prior art, and that the dependant dehydration claims need no amendment. However, claim 25 has been amended to specifically recite the sequential nature of the claimed elements.

With regard to the statement in the Office Action, at pages 3-4, that "Hill et al. teaches inserting a substrate and dehydrating it with heated inert gas and vacuum pumping the chamber before coating", Applicant disputes this characterization of the reference. Hill

states, at Column 1 of page 1 of the specification, at lines 29-39, that the invention comprises "silicon coating being applied by chemical vapour deposition in a single step treatment from a mixture of monosilane (SiH_4) and an inert gas or a mixture of monosilane, hydrogen and an inert gas at a temperature in excess of 748K and at substantially atmospheric pressure." Nowhere does Hill describe vacuum pumping the chamber before coating, as it is geared to an atmospheric pressure process. The portion of Hill referenced in the office action at lines 105-127 discuss vapour content of the gas leaving the vessel as opposed to any mention of vacuum pumping.

With regard to claim 20, nowhere do Hill or Loan disclose or describe, alone or in combination, the elements of claim 20, as amended. Applicant seeks withdrawal of this rejection with regard to independent claim 20.

With regard to claim 40, nowhere do Hill or Loan disclose or describe, alone or in combination, the elements of claim 40, as amended. Applicant seeks withdrawal of this rejection with regard to independent claim 40.

To the extent that the Examiner may feel that the claim amendments to independent claims 20 and 40 in any way present new searchable material, Applicant points out that previously presented dependent claims 42-45 (although currently 42 is cancelled) already had silanes, and sub groups of silanes, as elements of those claims and thus these limitations have been part of the examination to date. Thus, dependencies have been imported into the independent claims, as opposed to new material being injected into the examination.

Applicant believes that that arguments related to the independent claims, as discussed above, form a complete response to all other rejections based upon the dependence of all other claims to these independent claims. Applicant requests withdrawal of all rejections, and further requests allowance of all pending claims.

Summary

Applicant has addressed all rejections. Applicant asserts that all claims are in a condition for allowance and respectfully requests allowance of all claims. If the Examiner should have any questions regarding this response, the Examiner may contact the undersigned at (831) 462-8270.

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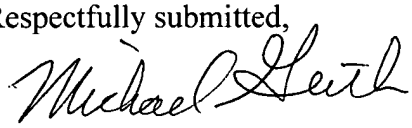
Respectfully submitted,



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